



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,846	06/30/2008	Nelson R. Barton	564462006801	4446

45975 7590 01/25/2010
VERENIUM CORPORATION
Intellectual Property Department
P.O. Box 910550
SAN DIEGO, CA 92191-0550

EXAMINER

ROBINSON, HOPE A

ART UNIT	PAPER NUMBER
----------	--------------

1652

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

01/25/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Ip@verenum.com
lynn.linkowski@verenum.com
jennifer.risser@verenum.com

Office Action Summary	Application No. 10/593,846	Applicant(s) BARTON ET AL.	
	Examiner HOPE A. ROBINSON	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,26-27,35-37,39-43,46,48-53,57-59,61-68,74,77,80,84,86,90,93 and 96-97 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1,26,27,35-37,39-43,46,48-53,57-59,61-68,74,77,80,84,86,90,93,96 and 97.

Restriction/Election

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 26 and 68 are drawn to a composition.

Group II, claim(s) 27 and 80 are drawn to a nanotubule and composition.

Group III, claim(s) 35-37 are drawn to a nucleic acid.

Group IV, claim(s) 39, 48 are drawn to a transgenic animal.

Group V, claim(s) 40, 49 are drawn to a plant.

Group VI, claim(s) 41-42 are drawn to a method for chiral selection.

Group VII, claim(s) 43 is drawn to a method for enzymatic biosynthesis of a composition.

Group VIII, claim(s) 46 is drawn to a cell.

Group IX, claim(s) 50-52 are drawn to a fiber/fabric or textile.

Group X, claim(s) 53 is drawn to a product of manufacture.

Group XI, claim(s) 54 and 93 are drawn to a medical device.

Group XII, claim(s) 57 is drawn to a medical device.

Art Unit: 1652

Group XIII, claim(s) 59 and 61 is drawn to a fluorescent protein.

Group XIV, claim(s) 62-63 are drawn to a bonding or adhesive composition.

Group XV, claim(s) 64 is drawn to a filter.

Group XVI, claim(s) 65-66 are drawn to a detecting/detoxifying device.

Group XVII, claim(s) 67 is drawn to a kit.

Group XVIII, claim(s) 74 is drawn to a vaccine.

Group XIX, claim(s) 77 is drawn to a method of modulating the immune system.

Group XX, claim(s) 84 is drawn to a method of ameliorating disease.

Group XXI, claim(s) 86 and 90 are drawn to a cell matrix/ tissue scaffold.

Group XXII, claim(s) 96 is drawn to a bottle brush polymeric protein.

2. Upon election of an Invention from Groups I-XXII, Applicant is further required to make a species election of one of the following:

Elect a non-cannulae domain (i.e. polypeptide or nucleic acid, etc.)

Elect a specific protein or nucleic acid structure (i.e. SEQ ID NO: 4, etc.)

Elect an activity (i.e. capable of assembling into a polymer, etc.)

Elect a type of protein (i.e. enzyme or Can A polypeptide, etc.)

Elect one of the following, a nanotubule, a tubule, a ball, a bundle, a fiber, a fabric, a filament, a sheet

Elect a specific cell type (i.e., bacterial or plant cell, etc.)

Elect a heterologous domain (i.e. toleragen, or epitope, etc.)

Elect a device (i.e. stent, plate, or catheter, etc.)

Art Unit: 1652

Elect a specific tissue (i.e. arteries, veins, etc.)

3. The inventions listed as Groups I-XXII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: because Groups I-XXII encompass several different products and constitute different inventions because the products have different structures and function. In addition, Groups I-XXII encompasses several patentable distinct methods using different products and has different modes of operation. Moreover, under PCT Rule 13.1 applicant is entitled to the first product, method of using and making said product. Thus, these inventions are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hope A. Robinson whose telephone number is 571-272-0957. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang, can be reached at (571) 272-0811.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hope A. Robinson/

Primary Examiner, Art Unit 1652